Massachusetts Biotechnology Council

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VIA EMAIL: fdadockets@oc.fda.gov

Food and Drug Administration
Division of Dockets Management
5600 Fishers Lane, Room 1061 (HFA-305)
Rockville, MD 20857

Re: Docket Number [FR Doc. 04-9147 Filed 4-21-04; 8:45 am]

Dear Sir or Madam:

On Tuesday, July 20, 2004, a four hour focus group was held at the Massachusetts Biotechnology Council (MBC) to aid the FDA Critical Path effort in identifying the most pressing scientific and/or technical hurdles causing major delays and other problems in the drug, device, and/or biologic development process, as well as proposed approaches to their solution.

The MBC gathered over 30 participants from local biotech companies.

The focus group identified the following hurdles and potential solutions:

Hurdle:
Uncertainty regarding the FDA use of new cellular therapeutic knowledge generated by genomics, proteomics and imaging technologies.

Solution:
The FDA should be aware of new technologies needed for new therapies and should be proactive in learning about them. Further it should set experimental and data analysis guidelines.

Hurdle:
Validation of biomarkers so the FDA accepts them as clinically sound indicators of efficacy and toxicity.

Solution:
FDA to have an in-house mindset stressing correlation to outcome rather than mechanism of action (MOA) understanding. The FDA should publicly disclose the parameters/characteristics it would require for a validated marker for a clinical endpoint, such as:

1. Define the threshold for empirical evidence required.

2. Create universal definitions for biomarker, surrogate, validated surrogate.

Guidance might have to relate to both disease and therapy because a disease could be treated with cellular therapy, gene therapy, surgery, or a drug.

Hurdle:
Lack of accurate end point assays for many diseases makes efficacy difficult to detect.

Solution:
The FDA could help in defining good markers, and arenas where new markers are needed or can be improved.

Hurdle:
Long toxicology and pharmacology studies due to slow emergence of classical end point measures.

Solution:
Shift whenever possible to molecular biomarkers.

Hurdle:
Acceptance of imaging to do pharmacokinetic studies.

Solution:
FDA to specify acceptance criteria for such data.

Hurdle:
Fear of finding sub-group toxicities through using more targeted techniques inhibits adoption.

Solution:
Share detailed toxicology data on approved drugs to create a large information base for future drugs, but keep it off limits for modifying existing drugs. If not, no sponsor will share the data.

Hurdle:
Biomarkers can sub-divide diseases into non-economic units.

Solution:
FDA leadership on cooperative tasks – encourage three or four companies to participate cooperatively in clinical trials.

Hurdle:
Current approach makes in uneconomic to create drugs for small diseases.

Solution:
Create new low-cost regulatory processes for small diseases. Better FDA setting of criteria could reduce trial costs. No specific criteria or techniques suggested.

Hurdle:
Poor interaction between the FDA and NCI.

Solution:
Combine their information to move forward more quickly ad efficiently.

Hurdle:
Inability to discuss pre-clinical safety and toxicology with the FDA unless a US clinical trial is underway – even if foreign equivalent trials are underway.

Solution:
Do more US clinical trials or pre-clinical meetings for a class of compound or a target.

Create a mechanism where sponsors can have earlier dialogue when important decisions are being made before IND or human trials anywhere in the world.

Hurdle:
Lack of a predictive tool accessible to all companies that could help in toxicology information and standards in animals.

Solution:
Workshop or guidance with chapters on toxicology study and what to continue what to stop, review management, practice guideline and toxicology support.

Hurdle:
Lack of experimental data sharing leads to duplicative testing and associated time delays and costs.

Solution:
Create ways to share information that has been sanitized to protect proprietary compound. Sponsors will require incentives to share information and maintain that data. FDA will also need to set standards for this type of data to enable comparability and technical exchange.

Hurdle:
Failures are not published – impossible to learn from failures

Solution:
Start a journal of failed clinical studies.

Hurdle:
Killing drugs early and looking at exploratory IND.

Solution:
Ability to look at others' information to learn from successes/failures.

Hurdle:
Uncertainty regarding the differences between exploratory IND and the traditional IND.

Solution:
A guidance will be out soon.

Hurdle:
FDA does not have all the answers

Solution:
Network with experts in academia, NIH, and industry to address questions.

Hurdle:
Time delays with the FDA – debilitating to sponsors.

Solution:
Sponsors must follow FDA's instructions exactly.

A transcript of the focus group session is available upon request.

Respectfully submitted,

Massachusetts Biotechnology Council

MT:lmw